IN THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application.

Listing of Claims

1. (Original) A method in a communications system for processing control messages in a packet-based portion of the communications system, the method comprising:

placing a priority indicator in a control message to indicate to an application handling the control messages that the control message is to be given priority in processing; and

placing a priority indicator in a header of a packet transporting the control message within the packet-based portion of the communications system to indicate to a node receiving the packet that the packet is to be given priority in processing.

2. (Original) The method of claim 1, wherein the packet is an Internet Protocol packet.

3. (Original) The method of claim 1, wherein the node is one of a server, a router, and a device/host platform hosting foreign agent functionality.

4. (Original) The method of claim 1 further comprising:

sending a request to the node to reserve processing resources to process the packet.

5. (Original) A method in a communications system for processing control messages for a session in a packet-based network within the communications system, the method comprising:

setting an indicator for a control message handling the session within the communications system through the packet-based network; and

sending the control message to the packet-based network, wherein the packet-based network provides preferential processing of the control message in managing the session based on the indicator.

6. (Original) The method of claim 5, wherein the indicator is an attribute value pair located in the control message.

7. (Original) The method of claim 5, wherein the control message is transported through a plurality of nodes and further comprising setting a second indicator, wherein the plurality of nodes provide preferential handling of the control message based on the second indicator.

8. (Original) The method of claim 7, wherein the second indicator is a differential service bit in an Internet Protocol header in a packet transporting the control message.

9. (Original) The method of claim 5, wherein a set of nodes is configured to reserve bandwidth for processing selected messages and further comprising:

sending a message to the set of nodes to reserve the bandwidth for processing the control message.

10. (Original) The method of claim 5, wherein the set of nodes include at least one of a router, a server, and a device/host platform hosting foreign agent functionality.

11. (Original) The method of claim 5, wherein the control message is a message from a set of messages to establish the session, terminate the session, and manage the session.

12. (Canceled)

13. (Canceled)

14. (Original) A node comprising:

a bus;

a communications adapter connected to the bus, wherein the communications adapter sends and receives messages to and from a packet-based network;

a memory connected to the bus, wherein the memory includes instructions for an application; and

a processing unit connected to the bus, wherein the processing unit executes a set of instructions to generate a control message for a session within an application at a remote node, place a priority indicator in the control message to indicate to an application handling the control messages that the control message is to be given priority in processing, and place a priority indicator in a header of a packet transporting the control message within the packet-based portion of the communications system to indicate to a node receiving the packet that the packet is to be given priority in processing.

15. (Original) A communications system for processing control messages in a packet-based portion of the communications system, the communications system comprising:

first placing means for placing a priority indicator in a control message to indicate to an application handling the control messages that the control message is to be given priority in processing; and

second placing means for placing a priority indicator in a header of a packet transporting the control message within the packet-based portion of the communications system to indicate to a node receiving the packet that the packet is to be given priority in processing.

16. (Original) The communications system of claim 15, wherein the packet is an Internet Protocol packet.

17. (Original) The communications system of claim 15, wherein the node is one of a server, a router, and a device/host platform hosting foreign agent functionality.

18. (Original) The communications system of claim 15 further comprising:

sending means for sending a request to the node to reserve processing resources to process the packet.

19. (Original) A communications system for processing control messages for a session in a packet-based network within the communications system, the communications system comprising:

setting means for setting an indicator for a control message handling the session within the communications system through the packet-based network; and

sending means for sending the control message to the packet-based network, wherein the packet-based network provides preferential processing of the control message in managing the session based on the indicator.

20. (Original) The communications system of claim 19, wherein the indicator is an attribute value pair located in the control message

21. (Original) The method of claim 19, wherein the control message is transported through a plurality of nodes and further comprising a second setting means for setting a second indicator, wherein the plurality of nodes provide preferential handling of the control message based on the second indicator.

22. (Original) The method of claim 21, wherein the second indicator is a differential service bit in an Internet Protocol header in a packet transporting the control message.

23. (Original) The communications system of claim 19, wherein a set of nodes is configured to reserve bandwidth for processing selected messages and further comprising:

sending means for sending a message to the set of nodes to reserve the bandwidth for processing the control message.

24. (Original) The communications system of claim 19, wherein the set of nodes include at least one of a router, a server, and a device/host platform hosting foreign agent functionality.

25. (Original) The communications system of claim 19, wherein the control message is a message from a set of messages to establish the session, terminate the session, and manage the session.

26. (Original) A computer program product in a computer readable medium for processing control messages in a packet-based portion of the communications system, the computer program product comprising:

first instructions for placing a priority indicator in a control message to indicate to an application handling the control messages that the control message is to be given priority in processing; and

second instructions for placing a priority indicator in a header of a packet transporting the control message within the packet-based portion of the communications system to indicate to a node receiving the packet that the packet is to be given priority in processing.

27. (Original) A computer program product in a computer readable medium for processing control messages for a session in a packet-based network within a communications system, the computer program product comprising:

first instructions for setting an indicator in a control message handling a session within the communications system through the packet-based network; and

second instructions for sending the control message to the packet-based network, wherein the packet-based network provides preferential processing of the control message in managing the session based on the indicator.

28. (Original) The computer program product of claim 27, wherein a set of nodes is configured to reserve bandwidth for processing selected messages and further comprising:

third instructions for sending a message to the set of nodes to reserve the bandwidth for processing the control message.